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Letters to the Editor

Comment on "Early nutritional support and physiotherapy improved long-term self-sufficiency in acutely ill older patients"

To the Editor:

In a recent study, Hegerová et al. [1] reported that early nutritional intervention in conjunction with early rehabilitation preserved muscle mass and independence in older patients hospitalized for acute disease. I consider this finding particularly important because hospitalization-associated disability occurs in approximately one-third of patients beyond the age of 70 y [2], and 88% of older inpatients with hospital-associated deconditioning have been found to be malnourished [3]. Combining early rehabilitation and nutritional care management is essential for preventing and treating hospitalization-associated disability. However, I believe several concerns are noteworthy.

First, the authors did not report the numbers of female and male patients in the intervention group and the control group. Mean lean body mass, height, and weight differ between men and women. However, the groups were not stratified by sex in the study. The prevalence of female and male patients in each group should have been specified as this may have affected the results concerning these factors.

Second, the authors did not report the number of obese patients. It was evident that the study included some obese patients because the mean + 1 SD for body mass index (BMI) cited for the intervention group (26.4 ± 4.3 kg/m^2) and the control group (27.8 ± 5 kg/m^2) indicated that the BMI was >30 in some patients. Nutritional supplementation (daily dosage of energy 600 kcal, protein 20 g) may not be appropriate for obese patients because it can potentially exacerbate obesity and impair activities of daily living (ADLs). Protein supplementation without carbohydrate and fat may offer a better approach to maintaining lean body mass and ADLs in obese patients.

Third, the method for calculating the total energy and protein deficit during the hospital stay was not reported. Although the total daily energy and protein intake and deficit were explicitly stated, the authors failed to disclose the total energy and protein requirement. There are several approaches to calculating these requirements. Moreover, the method should have been described because this in turn may have affected estimations of the total energy and protein deficit and lean body mass.

Fourth, the statistical significance of the difference in the change of lean body mass between the two groups was not reported. Changes in lean body mass in the two groups were analyzed separately, and the difference between the groups appeared to be clinically significant. However, the authors failed to confirm whether or not the difference was statistically significant. Therefore, the benefit of nutritional support and physiotherapy with respect to lean body mass was uncertain.

Finally, the significance of the differences in the Barthel Index (BI) between the groups was unclear. The authors reported that a similar trend was detected even 12 mo after discharge from the hospital (10.3 ± 21.6 versus 9.7 ± 19.2 points); however, the difference between groups was not statistically significant. With the exception of this 12-mo period after discharge, changes in the BI were analyzed only separately for the intervention and the control groups. The largest difference in the change in the BI between the two groups was 3.9 points for the period from admission to 6 mo. This difference appeared to be clinically small. However, because the authors did not state whether or not the differences between the groups with regard to changes in the BI were statistically significant, the beneficial effect of nutritional support and physiotherapy on ADLs remains unknown.

I believe that the authors should address these concerns to clarify their findings.

References

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[3] Wakabayashi H, Sashika H. Malnutrition is associated with poor rehabilitation outcome in elderly inpatients with hospital-associated deconditioning a prospective cohort study. J Rehabil Med 2014;46:277–82.

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